***Amendments to the Claims***

Claims 1-12 (Cancelled).

Claim 13 (Original):  For use with a separation medium for receiving a test aliquot and producing molecular fragments from the test aliquot, and an image capturing device for producing an image of the molecular fragments to measure intensity data from the molecular fragments, a data processing system for measuring endonuclease activity from the test aliquot, comprising:

modeling means for placing the intensity data to a plurality of intensity profiles;

peak integration means for computing an intensity ratio from each intensity profile; and

forecasting means for computing an unit call from said intensity ratios.

Claim 14 (Original):  A system of claim 13, wherein said peak integration means further comprises:

partial band integration means for integrating the intensity data relating to a set of partial bands selected from said plurality of intensity profiles; and

final band integration means for integrating the intensity data relating to a set of final bands selected from said plurality of intensity profiles.

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Claim 15 (Original): A system of claim 13, further comprising:

approximation means for producing a trend from each intensity ratio from said plurality of intensity profiles.

Claim 16 (Original): A system of claim 15, further comprising:

collocating means for measuring a threshold crossing value from a regression of said trend towards a threshold crossing level, wherein said threshold crossing value determines said unit call.

Claim 17 (Original): A system of claim 13, further comprising:

calibrating means for adjusting a calibration factor utilized by said forecasting means to compute said unit call.

Claim 18 (Original): A system of claim 13, further comprising:

normalizing means for removing at least one of outliers and faulty intensity data to correct said intensity profiles.

Claim 19 (Original): A computer program product comprising a computer useable medium having computer readable program code means embedded in said medium for causing an application program to execute on a computer used to measure endonuclease activity from a test aliquot, said computer readable program code means comprising:

a first computer readable program code means for causing the computer to fit intensity data to a plurality of intensity profiles, wherein said intensity data represent measurements taken from a digital image of molecular fragments produced in the test aliquot;

a second computer readable program code means for causing the computer to derive an intensity ratio from each intensity profile; and

a third computer readable program code means for causing the computer to derive an unit call from said intensity ratios.

Claim 20 (Original): A computer program product according to claim 19, wherein said second computer readable program code means further comprises:

a fourth computer readable program code means for causing the computer to integrate said intensity data relating to a set of partial bands selected from said plurality of intensity profiles; and

a fifth computer readable program code means for causing the computer to integrate said intensity data relating to a set of final bands selected from said plurality of intensity profiles.

Claim 21 (Original): A computer program product according to claim 19, further comprising:

a fourth computer readable program code means for causing the computer to produce a trend from each intensity ratio from said plurality of intensity profiles.

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Claim 22 (Original): A computer program product according to claim 21, further comprising:

a fifth computer readable program code means for causing the computer to measure a threshold crossing value from a regression of said trend towards a threshold crossing level, wherein said threshold crossing value determines said unit call.

Claim 23 (Original): A computer program product according to claim 19, further comprising:

a fourth computer readable program code means for causing the computer to adjust a calibration factor utilized by said third computer readable program code means to derive said unit call.

Claim 24 (Original): A computer program product according to claim 19, further comprising:

a fourth computer readable program code means for causing the computer to remove at least one of outliers and faulty intensity data to correct said intensity profiles.